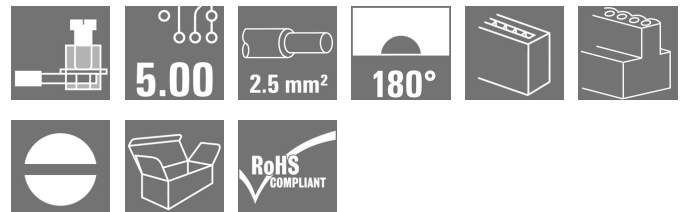


OMNIMATE Signal - series BL/SL 5.00
BLZ 5.00/08/180 SN OR BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Do not use product for new
developments



Female plugs with clamping-yoke screw for wire connection with straight (180°) outlet direction. The female plugs provide space for labelling and can be coded.

General ordering data

Delivery status	This article will no longer be available in the future.
Available until	2019-12-31
Type	BLZ 5.00/08/180 SN OR BX
Order No.	1571410000
Version	PCB plug-in connector, female plug, 5.00 mm, No. of poles: 8, 180°, Clamping yoke connection, Clamping range, max. : 3.31 mm², Box
GTIN (EAN)	4008190052386
Qty.	50 pc(s).
Product data	IEC: 400 V / 19 A / 0.5 - 2.5 mm² UL: 300 V / 15 A / AWG 26 - AWG 12
Packaging	Box
Alternative product	1954430000

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Technical data**Dimensions and weights**

Width	40 mm	Width (inches)	1.575 inch
Height	15.2 mm	Height (inches)	0.598 inch
Depth	20.1 mm	Depth (inches)	0.791 inch
Net weight	12.15 g		

system parameters

Product family	OMNIMATE Signal - series BL/SL 5.00	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	5 mm
Pitch in inches (P)	0.197 inch	Conductor outlet direction	180°
No. of poles	8	L1 in mm	35 mm
L1 in inches	1.379 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	2.5 mm ²
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Volume resistance	4.50 mΩ	Can be coded	Yes
Stripping length	7 mm	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.5 Nm	Clamping screw	M 2.5
Screwdriver blade	0.6 x 3.5	Screwdriver blade standard	DIN 5264
Plugging cycles	25	Plugging force/pole, max.	10 N
Pulling force/pole, max.	8 N		

Material data

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
CTI	≥ 200	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	Copper alloy	Contact surface	tinned
Layer structure of plug contact	4-8 μm Sn hot-dip tinned	Storage temperature, min.	-25 °C
Storage temperature, max.	55 °C	Max. relative humidity during storage	80 %
Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	100 °C

Conductors suitable for connection

Clamping range, min.	0.13 mm ²	Clamping range, max.	3.31 mm ²
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 12
Solid, min. H05(07) V-U	0.5 mm ²	Solid, max. H05(07) V-U	2.5 mm ²
Flexible, min. H05(07) V-K	0.5 mm ²	Flexible, max. H05(07) V-K	2.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.5 mm ²	w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm ²	w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm ²
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.0 mm; 2.4 mm	Reference text	The outside diameter of the plastic collar should not be larger than the pitch (P).
Max. clamping range	3.31 mm ²		


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Technical data
Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Tu=20°C)	19 A
Rated current, max. no. of poles (Tu=20°C)	14.5 A	Rated current, min. no. of poles (Tu=40°C)	16 A
Rated current, max. no. of poles (Tu=40°C)	12.5 A	Rated voltage for surge voltage class / pollution degree II/2	400 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	250 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV	Short-time withstand current resistance	3 x 1s with 120 A

Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	200039-1121690
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	15 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 12
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Rated data acc. to UL 1059

Institute (UR)		Certificate No. (UR)	E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	15 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 12
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	20 mm
VPE width	175 mm	VPE height	235 mm

Classifications

ETIM 3.0	EC001284	ETIM 4.0	EC002637
ETIM 5.0	EC002637	ETIM 6.0	EC002638
UNSPSC	30-21-18-10	eClass 5.1	27-26-07-04
eClass 6.2	27-26-07-04	eClass 7.1	27-44-04-02
eClass 8.1	27-44-04-02	eClass 9.0	27-44-03-09
eClass 9.1	27-44-03-09		

Data sheet

**OMNIMATE Signal - series BL/SL 5.00
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Technical data

Notes

- | | |
|-------|---|
| Notes | <ul style="list-style-type: none"> • Additional colours on request
 • Gold-plated contact surfaces on request
 • Rated current related to rated cross-section & min. No. of poles.
 • Wire end ferrule without plastic collar to DIN 46228/1
 • Wire end ferrule with plastic collar to DIN 46228/4
 • P on drawing = pitch
 • Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards. |
|-------|---|

IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.
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Approvals

Approvals



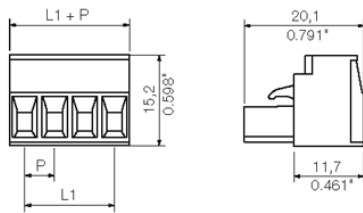
ROHS	Conform
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Downloads

- | | |
|---|---|
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer |
| Brochure/Catalogue | FL DRIVES EN
MB DEVICE MANUF. EN
FL DRIVES DE
FL BUILDING SAFETY EN
FL APPL LED LIGHTING EN
FLIndustr.CONTROLS EN
FL MACHINE SAFETY EN
FL HEATING ELECTR EN
FL APPL INVERTER EN
FL_BASE_STATION_EN
FL ELEVATOR EN
FL POWER SUPPLY EN
FL 72H SAMPLE SER EN
PO OMNIMATE EN |

Data sheet**OMNIMATE Signal - series BL/SL 5.00
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Drawings**Dimensional drawing**

MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING

Technical Data

Rev.

Material data

Insulation material type	PBT
Insulation material colours	see order sheet
Insulation material flammability class	UL94 V-0
Insulation resistance	>10 ⁵ MOhm
Contact base material	Cu-alloy
Contact plating	tin plated

System characteristic values

	with counterpart	SL5.00 180°
Pitch P	mm/inch	5.00/0.197
Number of rows		1
Dielectric strength (r.m.s withstand voltage)	kV	>2.21
Mechanical operating cycles acc. to DIN IEC 512		25
Pull in force (max)	N/pole	10
Pull out force (max)	N/pole	8
Through resistance (typical)	mOhm	2.0
Operating temperature range	°C	-55...+100
Degree of protection acc. to VDE 0106 (plugged/unplugged)		finger safe / finger safe
Degree of protection acc. to DIN EN 60529 (plugged/unplugged)		IP20 / IP20
Conductor connection method		clamping yoke
Screw size		M2.5
Screw torque max acc. to EN 60999	Nm	0.4
Screw driver type		SD 0.6 x 3.5

Application notes

Coding possibility	yes/no	yes (accessory)
Joinable without loss of pitch	yes/no	yes
Manual assembly of modules	yes/no	no
Max number of poles	n	24

Conductor

Clamping range	mm ²	0.08...2.5
"e" solid H05(07) V-U	mm ²	0.5...2.5
"f" flexible H05(07) V-K	mm ²	0.5...2.5
"f" with ferrule acc. to DIN 46228/1	mm ²	0.5...2.5
... with plastic collar acc. to DIN 46228/4	mm ²	0.5...1.5
Conductor insulation stripping length	mm/inch	7/0.276
Conductor insulation diameter max.	mm	n.a.
Two wire clamping range	mm ²	n.a.
Gauge to EN 60999 (a x b ; Ø)	mm	2.8 x 2.4; 2.4

IEC 664-1 / VDE0110 (4.97) rated data

Rated cross section acc. to EN 60999	mm ²	2.5
Rated current @ 20°C ambient (together with SL5.00/2)	A	18
Rated current @ 40°C ambient (together with SL5.00/2)	A	15
Overvoltage category / Pollution degree		III/3 III/2 II/2
Rated voltage	V	250 320 400
Rated impulse voltage	kV	4.0 4.0 4.0

UL 1059 rated data



Rated voltage	V	300	-	300
Rated current	A	15	-	10
AWG wire range (field wiring / factory wiring)		22...12		

CSA C22.2 rated data



Rated voltage	V	300	-	300
Rated current	A	15	-	10
AWG wire range (field wiring / factory wiring)		26...12		

Packaging

carton

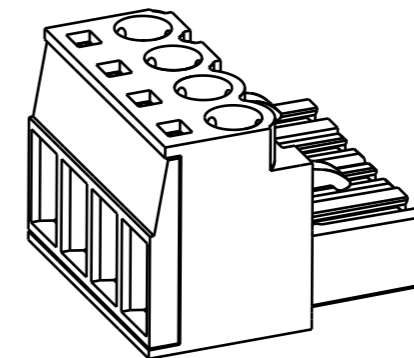
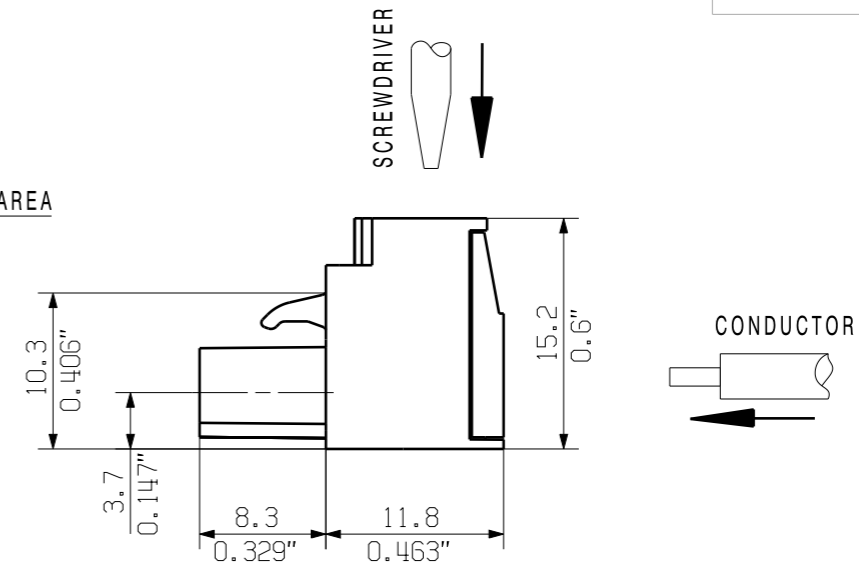
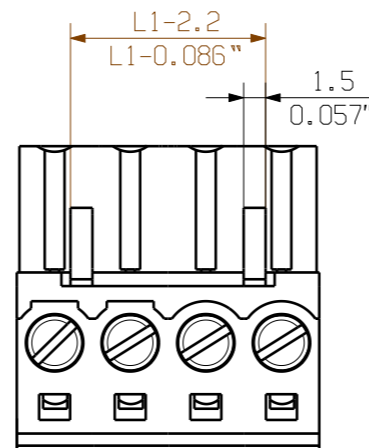
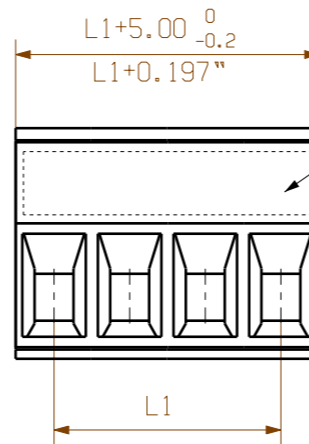
Downloads

www.weidmueller.de

- Without locking latches
- Sum of ambient temperature and temperature rise
- Referred to rated cross section and maximum pole number

n.a. = not applicable

Subject to technical changes



24	115,00	4,531
23	110,00	4,334
22	105,00	4,137
21	100,00	3,940
20	95,00	3,743
19	90,00	3,546
18	85,00	3,349
17	80,00	3,152
16	75,00	2,955
15	70,00	2,758
14	65,00	2,561
13	60,00	2,364
12	55,00	2,167
11	50,00	1,970
10	45,00	1,773
9	40,00	1,576
8	35,00	1,379
7	30,00	1,182
6	25,00	0,985
5	20,00	0,788
4	15,00	0,591
3	10,00	0,394
2	5,00	0,197
n	L1 [mm]	L1 [Inch]

SHOWN: BLZ 5.00/4

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

	METRIC TOLERANCES: X. = ±0.3 X.X = ±0.1 X.XX = ±0.05		CAT.NO.:	
	43216/5 11.05.09 HELIS_MA 00		C 18227 28	
MODIFICATION			DRAWING NO. ISSUE NO. SHEET 02 OF 06 SHEETS	
		DATE	NAME	
SCALE: 2/1		DRAWN	HELIS_MA	
SUPERSEDES:		RESPONSIBLE	HERTEL_S	
		CHECKED	13.05.2009 HECKERT_M	
		APPROVED	HECKERT_M	
PRODUCT FILE: BLZ 5.00			7146	

BLZ 5.00/.../ 180 (B)
BUCHSENLEISTE
SOCKET BLOCK

WEITERGABE SOWIE VERVIELFÄLTIGUNG DIESES DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATTET.
 ZUWIDERHANDLUNGEN VERPFLICHTEN ZU SCHADENERSATZ. ALLE RECHTE FUER DEN FALL DER PATENT-, GEBRAUCHSMUSTER-, ODER GESCHMACKSMUSTERERTRAGUNG VORBEHALTEN.
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